



Dart Aerospace Ltd.
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D3582-1-BENT
Job Sheet 201680



Part No: D3582-1-BENT

Job Qty: 4 pcs

Part Name: Skidtube Assembly BK117



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/8/19

Job Tracking No:

Created By: Marie Lajeunesse

Due Date: 10/25/19

Description:

Type: Stock

Note: DWG D3582 page 1 REV.E SHEET 1 IPP REV:A 14.01.17 NEW ISSUE DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Skidtubes - Bend - 1	4 pcs	10/25/19	10/25/19	0.00	0.90	Skidtubes - Bend		<i>mkh</i>
120	QC 5	4 pcs	10/25/19	10/25/19	0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		<i>BE</i>
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
							QC 5 - 40		
							QC 5 - 61		
							QC 5 - 81		
130	Packaging 3-1 - Stock - B4B	4 pcs	10/25/19	10/25/19	0.00	0.00	Packaging 3 - 1 - B4B		
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		
							Packaging 3 - 5 - B4B		
							Packaging 3 - 6 - B4B		
							Packaging 3 - 7 - B4B		
							Packaging 3 - 8 - B4B		
							Packaging 3 - 9 - B4B		
							Packaging 3 - 10 - B4B		
							Packaging 3 - 11 - B4B		



Container No: S221590



Part: D3582-1-BENT

Job No: 201680

Serial No/Batch: S221590

Revision:

Inspector:

Exp Date:

Instructions: Various STC's

Dart Aerospace Ltd.
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Date: 10/10/19

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				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	BE
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	DAG
				Packaging 3 - 36 - B4B	21
140 QC 21 - SA	4 pcs	10/25/19	0.00 0.00	QC 21 - SA - 21	9-09
				QC 21 - SA - 70	
				QC 21 - SA - 53	

Part Op 110 - (CNC Delta 100 Bender) Bend tube as per program D3582 on CNC Bender and Dwg D3582. Folio 3, use bending
 Descriptions: aid DT9632 2- cut fwd end of tube as per dwg

120 - (QC5- Inspect part completeness to step on W/O)

130 - (Identify as per dwg & Stock Location: LG002) LOCATION : LG002

140 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2962-150	3.540 Outer Tube, Extrut	4 pcs (1 ea)	110-Skidtubes - Bend - 1	S 175 497

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-Skidtubes - Bend - 1	D2962-150	4	55	0

Part Specifications

Specifications could not be found.

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8 7 6 5 4 3 2 1

ITEM	Qty	Part Number	Description
	X	D3682-041	SKIDTUBE ASSEMBLY
1	1	D2982-150	EXTRUSION
2	1	D2984	CAP
3	1	D2985	CAP
4	1	D2971	CROSS BOLT SPACER
5	1	D3508-3	WEARPLATE
6	1	D3508-8	WEARPLATE
7	1	D3508-11	WEARPLATE
8	1	D3508-13	WEARPLATE
9	1	D3558-3	GASKET
10	1	D3558-8	GASKET
11	1	D3558-11	GASKET
12	1	D3558-13	GASKET
13	1	D3584-1	WEB
14	3	D3682-1	CROSS BOLT SPACER
15	1	D3682-3	CROSS BOLT SPACER
16	2	D5304-1	CROSS BOLT SPACER
17	2	D5520-1	DOUBLER
18	28	AN304A	BOLT
19	2	AN3-5A	BOLT
20	2	AN4-4A	BOLT
21	28	NAS1148C0332R	WASHER (AN860Q10L)
22	2	NAS1148D0332J	WASHER (AN860Q10L)
23	2	NAS1148D0416J	WASHER (AN860QD416L)
24	38	AL8-1032-130	INSERT
25	2	AL87-428-165	INSERT
26	68	CR3212-5-05	CSK RIVET, CHERRY MAX

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

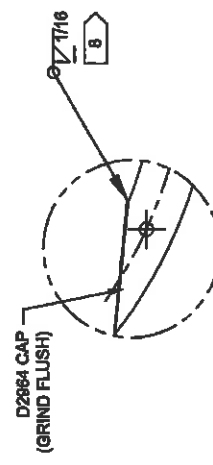
NO. 701688 MWS
19-12-08

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: CHEMICAL CONVERSION COAT PER QSI 005 4.1 PRIOR TO INSERTING D3584-1 WEB. POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3. ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4
 - 3) TOLERANCES: PER DART QSI 016 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 18.2 lbs
 - 8) WELDING: PER DART QSI 004.
 - 9) INSERT D3584-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-2411-281 ADHESIVE PER DART QSI 015 AFTER BENDING.
 - 10) USE DART DRILL TEMPLATE DTR800 TO LOCATE AND DRILL Ø0.297 HOLES (38 PLACES) FOR WEARSHOE INSERTS. INSTALL AEL8-1032-130 PER SECTION G-G (38 PLACES) AFTER FINISH SEAL WEARPLATE BOLTS WITH SIKAFLEX-2411-281.
 - 11) DO NOT INSTALL AN304A BOLTS AND NAS1148C0332R WASHERS IN INDICATED LOCATIONS
 - 12) LOCATE QTY (34) HOLES ONTO THE SKIDTUBE PER D6520-1 DOUBLER AND DRILL Ø0.161 THRU SKIDTUBE AND DOUBLER USING DTT0308. COUNTERSINK Ø0.286 x 100° (34 PL) PER DOUBLER AND INSTALL EACH D5520-1 DOUBLER USING QTY (34) CR3212-5-05 CSK RIVETS.

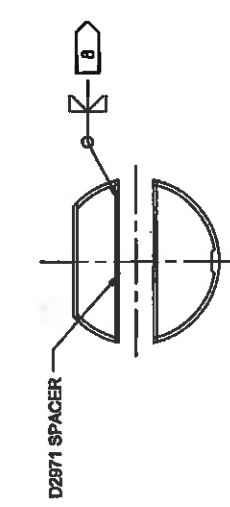
RELEASED
2017-08-11
17-547

E	MOVE VIEWS FROM SHT 1 TO SHT 2. ADD ITEMS 17 & 26 AND NOTE 12-13. Ø0.187 HOLE WAS Ø0.175. ADD SHT 3. ADD DETAIL J. SECTION F-F ADD D5520-1. SCALE ON VIEWS WAS 3X.	AJS	17.03.27
D	D5304-1 WAS D2973; REVISE BOM & SECTION F-F & SECTION NOTES (ZN B7-3, A8-3); REF NCR19-8160	RF	17.01.09
C	D3482 PLUG ASSEMBLIES REMOVED. REFORMAT NOTES SHT 1	AP	15.11.02
B	29.88 WAS 28.87 (ZN C5-1). INCORPORATED D50 D3582A-1 (ZN D5-1). FORMAT TO CURRENT STD	RF	15.02.20
A	NEW ISSUE	PH	07.06.06
REV.	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN	AJS		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	17.03.27		
DART AEROSPACE USA, INC EUGENE, OR			
DRAWING NO. D3582			
TITLE BK 117 SKIDTUBE ASSEMBLY			
REV. E SHEET 1 OF 4			
SCALE NTS			
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1 2 3 4 5 6 7 8

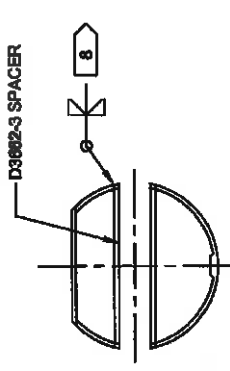


DETAIL C
SCALE 4X



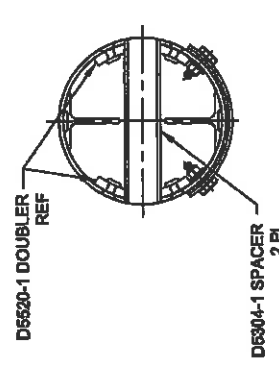
SECTION D-D
SCALE 4X

SECTION D-D NOTES
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:
1. CHAMFER HOLE 0.030 x 45°
2. INSERT D2871 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.750 DRILL TO REMOVE SPILL OVER



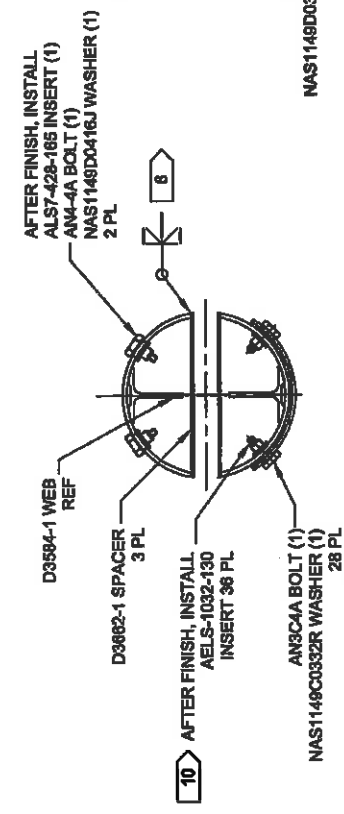
SECTION E-E
SCALE 4X

SECTION E-E NOTES
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:
1. CHAMFER HOLE 0.030 x 45°
2. INSERT D3882-3 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.672 DRILL TO REMOVE SPILL OVER



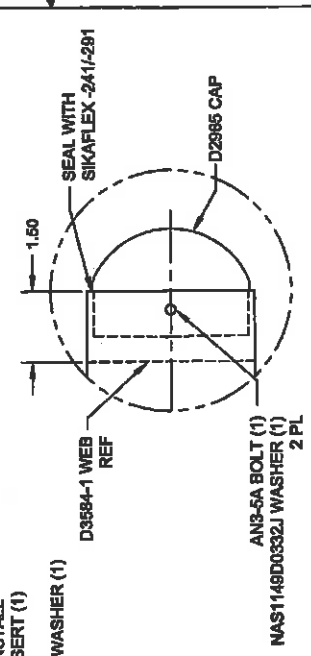
SECTION F-F
SCALE 4X
2 PL

SECTION F-F NOTES
AFTER BENDING AND DRILLING ASSY
PERFORM THE FOLLOWING:
1. INSERT D6304-1 SPACER
2. SWAGE TO Ø0.565 +0.005/-0.000 X 1.0
DEEP PER Q81 002
3. OPEN THRU HOLE TO Ø0.625
4. GRIND FLUSH



SECTION G-G
SCALE 4X
10

SECTION G-G NOTES
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:
1. CHAMFER HOLE 0.030 x 45°
2. INSERT D3882-1 SPACER (3 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.515 DRILL TO REMOVE SPILL OVER



DETAIL H
SCALE 4X
9

SECTION H-H NOTES
AFTER BENDING AND DRILLING ASSEMBLY
PERFORM THE FOLLOWING:
1. CHAMFER HOLE 0.030 x 45°
2. INSERT D3884-1 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. PASS Ø0.672 DRILL TO REMOVE SPILL OVER

DESIGN	PH	PH	PH
DRAWN	PH	PH	PH
CHECKED	PH	PH	PH
INFO. APPR.	PH	PH	PH
APPROVED	PH	PH	PH
DATE	17.03.27	17.03.27	17.03.27

DART AEROSPACE USA, INC
EUGENE, OR
DRAWING NO. D3582
SHEET 3 OF 4
SCALE NTS
BK 117 SKIDTUBE ASSEMBLY
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RELEASED
R 2017-08-11

Entered:

Date:

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No.

Route update only



Job: <u>201680</u>		DEPARTMENT/PROCESS			
Part No. <u>D3582-1-RENT</u>		Skid-tube ☒	Cross tube ☐	Eng. (Non-AW) ☐	Engineering ☐
		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Water Jet ☐
		Large Fab ☐	Finishing ☐	Rec/Store/Packaging ☐	Supplier ☐
		Rework ☐	Quality ☐		
		Scrap ☐			
		Use-as-is ☒			
Date: <u>19.10.31</u>	Sequence #: <u>120</u>	QTY Affected: <u>1</u>			
Description Work Order Deviation		Disposition			
Skidtube cut at 48°, dug 6°		Acceptable to engineering			
		Completed By <u>NO 19.10.30</u>			
		Lead hand / Supervisor <u>TW 19-10-31</u>			
		QC / QA Coordinator <u>D 19.10.31</u>			
MRB (QS1042) <u>NO 19.10.30</u>					
Root Cause		FAULT CATEGORY			
Operator ☐	Pressure/Forced ☐	Contamination ☐	Power Loss/Surge ☐	Positioned Wrong ☐	
Manufacturing Process ☐	Bending ☐	Misaligned/off center ☐	Folio/Program ☐	Outside Tolerance ☒	
Equip/Tooling ☐	Crushing ☐	BOM/Route ☐	Grain Direction ☐	Drawing ☐	
Handling/Preservation ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Finish ☐	
Material ☐	Crimp/Kink/Ripple/Wave/Twist ☐	Incomplete/Unclear Instructions ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	
Product Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Out of Sequence ☐	Misread ☐	
Process Improvement ☒	Mislabeled ☐	Fit/Function ☐	Off-set/Set-up ☐		
Human Factors ☐	Other/Details:				